a digestion which had been impaired over many years; a spirit of hopefulness was breathed by a wise and optimistic physician into this poor lady's mind, and she eventually recovered, and lived for many years without any return of the heart attacks which an unjustified opinion had led her to regard as her summons to death.

I have lingered over these cardiac conditions at too great length, but it is in the field of heart disease more than any other that the neurotic question becomes, both for the physician and his patient, one of such superlative importance. There is no certain means by which we can be infallibly guided, and, with all the care we can take, the best of us must make mistakes, but my personal experience justifies me in believing that along the pathway of a cheerful prognosis lies the doctrine of comfort for those who, on account of their temperament, are liable to construe out of a hedging opinion the confirmation of their worst fears. I go further, because I believe that, even in the presence of serious organic disease and with the knowledge that a heart is wearing thin, we lighten the remaining days or years of our patient's life, and add to his courage and happiness by keeping alive within him the spirit of hopefulness.

As regards asthma, which may be regarded as the greatest of all the respiratory bugbears of neurotic patients, time will not allow me to do more than glance at it. Asthma may occur under many circumstances, and is frequently secondary to some other disease; but true spasmodic asthma is still a disorder for which no definite organic cause has been found, and it is one which afflicts chiefly those who have inherited or begotten the neurotic temperament. We do not see much of it in our hospital wards, because it is most common among the upper and middle classes of society, where neuroses of one type and another abound. It is, when once contracted, one of the most intractable of all maladies. It does not end fatally, but exhibits a recurrent persistence which makes the sufferer's life miserable and drives him to one doctor after another, then to one quack remedy after another, until he becomes an unbeliever in rational treatment and the slave of "cures." But while all this is true, the point about asthma which in connexion with our subject to-day must not be overlooked is that its manifestations must not tempt us to carelessness. The following case aptly illustrates what may happen

A man of middle life, who had suffered from ordinary spasmodic asthma since boyhood, came to me after an interval of many years and told me that he had become so tired of the ineffectual attempts of innumerable doctors to cure his trouble that, after consulting many in different parts of the world since I had last seen him, he had, for several years past, trusted to patented medicines of one kind or another. He had also tried almost every climate on the face of the earth, but was unable to assure himself that his attacks were either fewer or less severe in one place more than another. The reason for his present visit to me was that, being accidentally in town, he had been, two nights previously, attacked by an unusually severe seizure, and he thought the excuse a good one for renewing an old acquaintanceship. I remembered him perfectly, and saw but little change in his physical condition. From the long continuance of his asthma his lungs had become emphysematous and obscured the physical state of his heart, but there were no murmurs or other abnormalities so far as could be heard through the noise of his breathing. He assured me that, but for his old asthmatic enemy, he was perfectly well. Fortunately for me, a passing complaint of failing eyesight, which he laughingly attributed to *anno Domini*, prompted me to look into his eyes, and there, to my surprise and regret, I found a marked albuminuric retinitis. This led to an examination of the urine, where full confirmation was forthcoming of an established interstitial nephritis. This patient's asthma was probably still, to some extent, of the paroxysmal type, but added to the old neurosis there was now a renal element of so serious a nature that his days are certainly numbered.

The case is one of the many daily illustrations we get of the need for a routine examination of the urine, but in the bustle of active work, this is an investigation which we are liable to neglect unless there be something in the symptoms otherwise to cause us to fear the existence of kidney mischief.

One more recent experience may be referred to as illustrating an asthmatic difficulty of a different type:

A young lady, who had been operated on ten days previously for the relief of a hydronephrosis, suddenly experienced in the night an attack of breathlessness which gave rise to the greatest alarm. She was distinctly neurotic, and from the day of her operation her digestion had been a source of trouble, with flatulent distension of the abdomen as a leading symptom. The fear was at once aroused that a pulmonary embolism was the

cause of her seizure, and a very guarded opinion was expressed to her friends, but the attack subsided and she experienced no recurrence and developed no subsequent pulmonary symptoms. The absence of pain in the chest made the suggestion of embolism doubtful from the beginning, but, under the circumstances in which the difficulty in breathing arose, the suspicion was justified, though a confident diagnosis either way would have been, at the time, unwarranted.

As in the region of the thorax, so in that of the abdomen, we meet with interesting problems in connexion with disorders of the stomach, intestine, kidney, and liver, and are frequently brought face to face with complex manifestations which demand the most searching clinical investigation to solve correctly. I must defer their consideration to a future opportunity, but in this region of the body as in the others to which I have alluded this afternoon, there is no lack of illustration to prove that the neurotic element in disease is one to reckon with, and that, despite some incredulity on the subject, there is no getting away from the fact that symptoms which are apparently wholly functional dominate the aspect of many illnesses, that they may obscure the true significance of organic manifestations, and that not infrequently they are so much the end-all and be-all of a disordered state of health as to justify the assumption that—at any rate so far as the present state of our knowledge enables us to judge—the neuroses must be taken into account as definite integers in our conception and treatment of disease.

A Lecture

ON THE

TREATMENT OF ECZEMATOUS PATIENTS.

DELIVERED AT THE MEDICAL GRADUATES' COLLEGE
AND POLYCLINIC, LONDON.

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IN no affection of the skin is it more important than in eczema to recall the axiom that it is the patient and not the disease that requires treatment; the characteristic which distinguishes the wise practitioner from the quack is that the former realizes that he is in the presence of a sentient human being who is the subject of disease; the latter has merely a nostrum which is applied to the disease with an inevitableness as monotonous as the response of an automatic machine to the insertion of the nimble penny. The title which I have used is intended to emphasize a protest—a more familiar, shorter, and less correct title would be "The Treatment of Eczema"—and my object will be to describe certain common forms of the disease with the methods of treatment which have been found serviceable in each type.

The very first difficulty to be overcome is the exact definition of what is meant by the term "eczema." It is unfortunate that no agreement exists as to what shall or shall not form a criterion of classification; one of the latest of these definitions, that of Dr. Norman Walker—"Eczema is the term commonly applied to any wet or scaly inflammation of the skin of the cause or nature of which the observer is ignorant"—is more humorous than helpful.

The older writers, before our idea of eczema became swamped with the introduction of Unna's "seborrhoeic eczema," insisted chiefly on the presence of "a serous discharge which stiffens linen" as an essential feature of eczema; the same feature distinguishes the phenomenon which recent French authors describe as "eczématisation," to which I shall refer again. But, now that there seems a reasonable prospect of the withdrawal from this class of the whole large body of disease at present called "seborrhoeic eczema"—which, as a distinguished writer has tersely put it, is not seborrhoea and not eczema—it is possible that the older simplicity may be restored, and it would certainly make for clearness and be in accordance with the actual practice of a large majority of medical practitioners if the advent at some time or other of "a

serous discharge which stiffens linen" were again to be made the essential criterion of the disease. The presence of such a discharge, however produced, would justify the classification of the affection in which it occurred as eczema; and, consequently, all forms of so-called eczematization and of traumatic dermatitis attended by such discharge would be included in this class. It has always seemed to me a very anomalous and absurd practice to call an inflammation of the skin the result of a known irritant by one name and an inflammation of the skin clinically absolutely indistinguishable in which the cause of the inflammation has escaped observation by another name. This absurd practice is properly satirized in the absurd definition quoted from Dr. Norman Walker's textbook. In my opinion it would be highly desirable—and the time is ripe—to revert to the conception thus excellently defined by Dr. Tilbury Fox:

Eczema is a catarrhal inflammation of the skin which is mainly characterized by a peculiar discharge, stiffening linen, and drying into thin yellow crusts, and having its stages of erythema, papulation, vesiculation, discharge, pus formation and squamation more or less marked under different circumstances, and followed in some cases by the secondary results of inflammation such as hypertrophy, oedema, and the like.

With this conception of the disease as a cutaneous reaction progressively passing through the phases enumerated and with a special tendency, by reason of the discharge, to become secondarily contaminated by pyogenic and other organisms, the apprehension and description of the various clinical variations become much more easy.

Acute Eczema.

This is the name given to an early erythematous eruption occurring with acute onset, generally on exposed surfaces such as the face, and after exposure to cold or irritants. The eruption may be aborted in its erythematous stages, or it may pass on to vesication and subsequent exudation and pus infection of the surface. The erythema when occurring upon parts where the subcutaneous tissues are lax, as on the face round the orbits, may be accompanied by pronounced subcutaneous oedema; the swelling and redness thus produced may closely simulate erysipelas, and acute eczema is frequently mistaken for that disease, from which it is distinguished by the absence of temperature and severe constitutional illness, by a less well demarcated margin between diseased and healthy skin, and often by the presence elsewhere of some patch of older eczema; it is not contagious, so that the history of infection common in erysipelas is absent. The treatment should be prompt and earnest; the possibility, with care, of causing the inflammation to subside without macroscopic vesication—for it is probable that even at this stage there are microscopic vesicles—if explained to the patient, will generally enlist his co-operation in the measures to be adopted, which entail confinement to an equable temperature indoors and the application of the blandest and most sedative lotions. In this stage rest in bed is often the best expedient to secure subsidence of the inflammation. I believe a pure milk diet, partly by its digestibility, partly by the large fluid intake which it ensures, is advisable; and the local application which I have found most useful is the following (lot. plumbi lactatis of the St. Mary's Hospital Pharmacopoeia):

Liq. plumbi subacet.	...	...	...	3j
Acid. sal.	...	...	...	gr. iij
Lactis	...	...	...	3j

This should be freshly prepared, and applied to the face after thorough shaking of the bottle with a clear, soft shaving brush and allowed to dry *in situ*, fresh application being made every four hours. Concurrently with this treatment the bowels should be kept loose, a result which commonly follows from the increased fluid of the dietary, but it may be necessary to ensure the result by saline aperients, of which Carlsbad Sprudel salts (a teaspoonful in a tumbler of hot water every morning) is one of the best. It is a common experience that alcoholic excesses increase the tendency to acute eczema, and the complete prohibition of alcohol is advisable in these cases.

The same type of acute erythematous eczema may occur upon other parts than the face, and must be similarly treated.

When the case is seen in the stage of vesication the possibility of aborting the inflammation is past, and since vesication is almost certain to be attended by pustulation the local treatment to be adopted becomes similar to that detailed under chronic eczema in which those stages are present.

Chronic Eczema.

An attempt has been made to differentiate the so-called artificial eruptions from eczema by the fact that while eczema recurs and becomes chronic, artificial eruptions cease when the cause is removed. But this differentiation is fallacious, for if the cause is constantly renewed the artificial eruption which is its response will also be renewed, and thus chronicity may be simulated. For example, a case noted by Dr. Whitfield of what was diagnosed as "chronic eczema of the mouth" proved to be due to the repeated use of an irritating liquid dentifrice. Many cases of what appear to be chronic eczema are the result of a persistent irritant, and all such causes must be rigidly investigated in any given case. The possibility of constant renewal of external irritation must be particularly borne in mind in the case of persons whose occupations oblige them to come in contact with agents such as chemicals (photographers, druggists, laboratory assistants, operating surgeons, etc.), irritating plants or bulbs, strong detergents (washerwomen, kitchen servants), and a large class of persons, such as bakers, cooks, furniture polishers, plasterers, painters, tar and gas workers, who are more obviously exposed to repeated chemical or thermal stimuli. In all such cases it becomes urgently necessary to avoid the pernicious contact if this be possible, especially during the acute stages of the reaction. When this is not possible there ensues a contest between the effects of the irritant and the remedial measures of the physician, in which the latter is not infrequently worsted.

Where no special cause can be identified and removed the conduct of the case becomes more difficult. Some general principles, however, may be enunciated, in the front rank of which I would place a caution not to use strong antiseptics, such as formalin. It is better to proceed gingerly at first with a patient whose cutaneous constitution is still a *terra incognita* to the practitioner. With a freely weeping surface, with much redness and itching, it will be found as a rule that lotions are more sedative and come more into actual contact with the diseased surface than ointments. For such surfaces a common prescription, and one which has done good service with me, is the following (lotio calaminæ oleosa):

Calaminæ	...	...	...	gr. xl
Zinci oxidi	...	...	...	gr. xx
Aq. calcis	...	...	...	3iij
Ol. olivæ	...	...	...	3j

This should be applied with a brush or a swab of cotton-wool, or strips of thin washed "butter muslin" may be soaked in the lotion and kept in position with a light muslin bandage. It is important that the part should not be kept hot, and the covering of an inflamed surface with wads of cotton-wool and several folds of a heavy bandage—a dressing too often resorted to by inexperienced house-surgeons—does not promote the comfort of the patient or the amelioration of the disease. Many practitioners advocate the use of powders in the wet stage of eczema, but my own experience leads me to prefer the formula I have given. When there is much pus infection of the discharge—a very frequent complication—it is often advisable to treat this feature at once, and a very useful means is to steep the part, when its position allows of this, in an antiseptic bath for twenty minutes or half an hour, drying the part carefully after with swabs of dry cotton-wool. The antiseptic used may be varied according to the fancy of the practitioner. I have found chinol (1 in 200 to 300) unirritating and efficacious; cyllin is also recommended (1 to 200); perchloride of mercury (1 to 2,000 or 3,000) may also be used, or this ingredient may be added to lot. calam. oleosa ($\frac{1}{2}$ grain to 3vj) when an antiseptic effect is particularly desired.

When the discharge has become less free, and the diseased surface, although not dry, has ceased to pour out exudation, the continuous application of a paste is less uncomfortable a means of treatment than the application of lotions. A paste differs from an ointment roughly in the addition to the greasy base of the latter of a consider-

able proportion of an inert powder, which appears to exert a blotting action, on the same principle which is aimed at in the familiar resort to powdered salt to dry a recent wine stain in a table-cloth. One of the most pleasant pastes thus indicated is Lassar's paste. This is often given with varying formulæ, and it is well to particularize the composition as follows:

Zinc oxide ...	...	...	...	24
Starch ...	...	...	...	24
Soft paraffin ...	...	...	...	50
Salicylic acid ...	...	...	...	2

In acutely irritative conditions the salicylic acid is best omitted; it may be retained and the quantity increased when there is less inflammatory reaction, and where much scaling has taken place. An equally good application, perhaps even superior (Cremor zinci, St. M. H.), where there is much redness of the skin, is the following:

Zinc. ox.	}	...	...	...	...	...	...	...	...
Aq. calcis		...	...	...	...	...	...	...	...
Ol. olivæ		...	...	...	...	...	...	...	...
Adip. lanæ	...	...	...	...	...	...	...	...	...

Dissolve lanolin in olive oil by heat, sift powdered zinc oxide into it, and whip up with lime water.

This may be thickly spread over the affected part, dusted with a fine starch such as potato starch, and left without any other covering than the clean cotton or linen underclothing of the patient.

Other powders used in the composition of pastes besides starch are fuller's earth, talc, kaolin, etc.

If the patient is seen in the stage of dry crusts, when the discharge has matted together the epithelial scales and débris of the surface into an impervious scab, local applications are useless until this is removed. This end may be effected by wet occlusive dressings when the adhesion of the scab is very pronounced—as, for example, on the scalp of children. Several folds of thin muslin, known as "butter muslin"—boiled in water to remove the stiffening used in its preparation and to sterilize it—are soaked in boracic acid lotion or in other weak antiseptic fluids, preferably tepid; the excess of the moisture is squeezed out, and the dressing is applied while wet and then covered with oil-silk or protective oiled paper and kept in position with a light bandage. The dressings should be changed as soon as they become dry. Starch poultices, boricated, may be used in the place of this dressing, but are not so free from risk of spreading the pus infection.

A method which I have found very useful in treating the pustular eczema so commonly the result of pediculosis capitis in weakly children is to cover the scalp with an ointment composed of equal parts of olive oil and ung. hyd. am. dil., and enclose the head in an oil-paper cap.

When the crusts have been removed, the application of an antiseptic ointment, such as ung. hyd. am. dil. or ung. hyd. nit. dil., either unamixed or with an equal quantity of ung. acid. sal., will usually check the superficial pus infection and reduce the part to the condition of an uncontaminated exudative or excoriated surface, which may then be treated with lotions or pastes as described above. It is often possible, and is always interesting, to watch under this treatment a successive retrogression in inverse order of the stages by which an erythematous eczematous patch becomes vesicating, exudative, and suppurating.

When the suppuration is not controllable by these methods, and the stage of "chronic pus infection" is threatened, it is remarkable with what good effect vaccine-therapy can be used. The nature of the contaminating organism must be ascertained, and it is preferable that the opsonic index for that organism should be taken before vaccines are used, but even in the absence of an opsonic estimation, an inoculation of the appropriate vaccine may be tentatively made. The dose used should be a very small one; in the case of staphylococcus, which is much the commonest organism thus found to be present, a dose of 20 to 100 millions will usually suffice. The clinical improvement is often striking, and in the event of such improvement the inoculation may be repeated in about ten days' time. The cases in which such inoculations are useful are also eminently those in which general management of the patient is important in the respect of diet, environment, change of air, scene, and occupation, which will be dealt with later on.

Not infrequently patches of inveterate eczema are met with in which individual lesions have persisted for months and even years. In all such cases careful search must be made for some associated cause, such as the presence of ichthyosis, which renders the skin peculiarly liable to become eczematous; of varicose veins; the possibility of the co-existence of constitutional disease, such as gout, diabetes, and tuberculosis, must be borne in mind and investigated. When no such underlying factor is discovered, and when these diseases, though present, are irremediable, attempts may be made to stimulate the growth of healthier epidermis by the exfoliation of the diseased stratum. One of the best methods of achieving this purpose is by the application every four or five days of the following lotion, painted on the part with a cotton-wool swab wrapped round a wooden stick, such as a match or penholder, and dipped into the lotion:

Phenol, liq. picis carb., glycerin., spir. vin. rectific., aa.

In the four or five days' interval between each application the part should be painted three times a day with lot. cal., which should be allowed to dry on the surface. If the carbolic lotion should prove too painful, a 10 per cent. solution of cocaine hyd. may be applied five minutes before the application of this.

A solution of nitrate of silver (10 to 15 grains to the ounce) acts in a similar way and should be used similarly, with the application of lot. calam. in the intervals of treatment. This method is particularly useful for chronic eczema of mucous surfaces, for example, about the anus, the lips, the vulva, the nipple. I have also found picric acid in 1 per cent. or $\frac{1}{2}$ per cent. strength of great service in treating chronic excoriated surfaces, as in pruritus ani with fissures.

Eczema of the nipple, especially of suckling women, is generally kept up by the presence of the milk, which, flowing over the surface, affords an excellent nidus for micro-organisms. An importance which it does not deserve is commonly ascribed to this affection from the erroneous notion that Paget's disease—epithelioma of the breast—begins as an eczema of the nipple. This has been shown not to be the case; the condition which was thought to be eczema has been demonstrated to be epitheliomatous even in the early stage which simulates eczema; the latter disease occurring upon the nipple is often difficult to treat, especially when the patient is obliged to suckle the infant; but once this process is finished the condition usually heals rapidly. Eczema of the vulva may similarly be protracted owing to the discharge over the labia of saccharine urine in diabetes, and the latter disease should be looked for in such cases.

The introduction of zinc into the skin by cataphoresis (ionization) promises a particularly valuable resource in old chronic thickened eczematous patches. A plate of zinc, the size of the patch to be treated, is used as positive electrode of an ordinary galvanic battery of 20 to 30 cells. The electrode is covered with several layers of gauze soaked in a 2 per cent. solution of zinc sulphate, and applied to the patch to be treated, the patient holding in his hand the ordinary cylindrical electrode attached to the negative pole. Contact may be maintained for five to ten minutes, the current averaging 3 to 6 milliamperes during the treatment. For these especially chronic patches x rays have also been shown to be useful. Some very suggestive experiments have been tried with textile fabrics impregnated with feeble solutions of radium salts, and applied to the surface of eczematous patches with good results.

A method which I have found useful in very chronic dry cases, with much lichenification of the skin, is the combination of occlusive dressings with tar ointment. Strips of lint thickly smeared with ung. picis are cut to the shape of the part, covered with oil-silk and cotton-wool and bandaged tightly over, and left in position for twenty-four or forty-eight hours. The same lint is to be repeatedly smeared with the ointment so that it becomes thoroughly impregnated with it. Under this treatment the resolution of the thickening and the healing of the skin are often very satisfactory.

Eczema of Children.

Young children frequently suffer from eczema of the face and scalp, which is too often ascribed to teething.

Arthur Hall has demonstrated that the most important cause of the infantile form of eczema is exposure to cold; local irritants, such as hard water, strong soap, dirt in its protean shapes, all contribute to the causation, and it is doubtful what remains in this group of disease when these causes are removed from it. A common error is to mistake the inflammatory reaction which accompanies and follows an eruption of urticaria—the strophulus of infants—for eczema. In certain positions, such as the buttocks and thighs, the presence of wet and soiled napkins are a frequent cause of eczema. Scabies is very common in young children, and the distribution being rather different to the distribution in adults, it often remains undiagnosed; in infants who are constantly handling with their feet and toes the eruption is often thickly present in these parts, and a secondary eczema from scratching, or from ill-devised applications, is quite a common occurrence. On the scalp pediculi, which are almost normal denizens of the hospital class of children, in weakly subjects produce a characteristic pustular eczema chiefly affecting the occipital region. Children suffer frequently from purulent otorrhea, and the vicinity of the external meatus is a favourite position for a secondary pustular “eczematization” engendered by the aural discharge. All these possible factors must be investigated, and it will be found that a surprisingly small number of cases remain unexplained by one or other of these causes. Whether there is such an entity as “reflex eczema,” the accompaniment of teething, of rickets, and other infantile disorders, is doubtful. There is no doubt that there is no risk involved in curing this condition as speedily as may be, in spite of the now somewhat obsolete opinion that the eczematous discharge in such reflex cases acts like a seton in checking internal inflammation, and that dangerous pulmonary and visceral complications may ensue upon a too swift cessation of the discharge. The essential desideratum of treatment is to protect the part from cold or irritants and to prevent scratching, which in very young children is often uncontrollable; in these cases it is well to adopt the device common in children's hospitals—namely, to bind round the arm at the elbow-joint a cylinder of cardboard, the corrugated variety used by druggists in wrapping bottles for post being particularly convenient. By this means flexion of the arms is prevented and scratching effectually stopped. Zinc cream, Lassar's paste, lot. calam. oleosa are all useful, and are employed in the same way as detailed above.

The child is especially exposed to the tender mercies of the patent medicine vendor, and it is not infrequent to see cases which have been rendered worse, or at least have got no better, while under treatment with Cuticura, Zambuk, Antexema, and other widely advertised nostrums. The BRITISH MEDICAL JOURNAL has published analyses of these products, which are thus described:

Cuticura.—A mixture of hard and soft paraffins, slightly perfumed with rose, and coloured green.

Zambuk.—Eucalyptus oil 14 per cent., pale resin (colophony) 20 per cent., soft paraffin 55 per cent., hard paraffin 11 per cent. green colouring matter a trace.

Antexema.—Soft paraffin 35.4, boric acid 1.5, gummy matter 12.4, water 50.7.

These formulae have all large proportions of soft paraffin, which when not well prepared is in itself a directly irritating substance to many skins.

The question of bathing children affected with eczema will be considered under the heading of “general management.” The nature of the diet is perhaps even more important in children than in adults. Hall pointed out that a majority of his cases of infantile eczema were breast-fed children, and there has been a tendency to reaction from the view that dietetic vagaries are responsible for the greater number of cases of infantile eczema. It nevertheless remains true that a diet which for a child under a year old comprises practically the same items as furnish forth the parents' table cannot be considered sedative.

Rigid insistence upon the exclusion of “tit-bits,” such as bacon, fried fish, salt foods, pickles, cheese, strong tea or coffee, and the general confinement to milk diet, will in such cases often in itself work wonders. Regularity in feeding in the case of young children is also highly important, the usual fault of out-patient mothers being that they feed their offspring as a means of quieting the “continual cry of the cherubim,” and consequently feed them much too

often. In children who have been thus injudiciously dieted, one of the first therapeutic measures to be taken is to clear out the alimentary tract with a purge, of which the mist. ol. ric. remains one of the best:

Ol. ric. ...	...	...	...	m ^v
Vin. ipecac. ...	...	...	...	m ^j
Glycerini ...	...	...	...	m ^v
Mucil. tragacanth. ...	...	...	...	m ^{xv}
Aq. ...	...	...	...	ad ʒj

Calomel in fractional doses, frequently repeated ($\frac{1}{2}$ grain every two hours) for a few days, is a valuable alternative. After free evacuation has thus been obtained, mist. gent. c. rheo may be used for a week or two until normal motions are well established:

Sod. bicarb. ...	...	...	...	gr. j
Ol. menth. pip. ...	...	...	...	m ^{ss}
Sp. chlorof. ...	...	...	...	m ^l
Inf. rhei ...	...	...	...	m ^{l5}
Inf. gent. co. ...	...	...	...	ʒj

Ter die.

General Management.

The general management of the patient is at least as important as the local therapeutics just detailed. It must not be forgotten that a patient with eczema, unlike the psoriatic, is generally ill; and routine methods unintelligently applied are less likely to be successful in this disease than in any other. Thus I have known a patient, who had been suddenly deprived of all stimulant on the general principle that stimulants are bad for eczema, improve immediately upon his being allowed to take with his meals some good port wine; his exhaustion, which prevented his eating, was thus helped and overcome, with entirely happy results. The question of alcohol is always a difficult one, and must be decided upon after careful investigation of the individual circumstances of each case. The young and plethoric will rarely be the better for it; the old, exhausted, or anaemic patient will not seldom benefit by some stimulant being allowed. I am a believer in the efficacy of large doses of fluid. Most town dwellers, at any rate, have a tendency to restrict the fluid part of their dietary, and it is sometimes advisable, in order to induce your patient to drink, to order some uneffervescent bottled water; it does not much matter what kind, provided it is pure. Contrexéville I have found the most widely palatable, and when the patient is not restricted to milk diet (in which case his fluid intake will be adequate) it is quite well for him to accustom himself to take a bottle of this a day. The real secret of many vaunted cures at spas and similar health resorts is the systematic and frequent drinking of pure water which they all agree in enjoining.

The Diet in Eczema.

I have noted in the infantile cases the children are usually breast-fed and fat and fed too often. Patients suffering from eczema usually eat too much. It is wise to restrict the quantity of meat to one meal a day, and the following items of diet are, as a general rule, to be avoided: Shellfish, pork, game, veal, spices, preserves, cheese, tomatoes, spinach, asparagus, salads, radishes, cucumbers, pickles, truffles, gooseberries, strawberries, oranges, alcohol, beer, tea, coffee. With so long an index expurgatorius, it may be asked, What can be taken? Butcher's meat once a day, veal excepted; fowl, with the exception of goose, turkey, and duck; fresh eggs, green vegetables, except spinach, cress, cauliflower; cooked non-acid fruits may be given. Milk foods of all kinds may always be cheerfully admitted, and in some cases should be the only food. The efficacy of internal remedies is much debated, and the practice of different physicians varies greatly according to their views on the relative importance of external irritants versus diathetic causes. The adhesion of the great French school of dermatology, headed by Besnier and Brocq, to the doctrine of diatheses, and the conception of skin disease as reaction of the organism to the innumerable accidents which may interfere with its complex working, has restored to a great extent the prestige of internal treatment, which had been rather dimmed by the views of the dominant Viennese school, and still further by the theories of bacterial causation so long held by Unna and his following. To the French school in greatest measure is due the more modern knowledge that eczema is primarily and essentially amicrobic;

the initial microscopic vesicle is demonstrated to be sterile; the later microbic infections are due to secondary contamination of the surface. With these views the importance of the study of the individual becomes enormously increased, and Brocq thus sums up the formidable series of investigations which should be made to elucidate causes of disease other than those of internal source:

"Hereditary pathological states, individual idiosyncrasies, defective alimentation, defective assimilation and excretion, troubles of the venous system, troubles of the circulatory system, troubles of lungs, kidneys, genital apparatus, ductless glands."

Where any such cause can be identified, treatment must be directed to its removal. The hereditary transmission of tendency to eczematous disease, as well as an individual idiosyncrasy, must be accepted by any person of wide experience, and the nature of the cause lifts it beyond the domain of practical therapeutics. Defective alimentation, covering as it does the ingestion of food, has been partly dealt with under the heading of diet; in full-blooded young subjects moderation of the intake of solids will probably be indicated; in the exhausted, impoverished patient of hospital practice, on the other hand, liberal diet and rest are at least as important as any therapeutic measures, as the improvement manifested by admission of such patients to the wards amply demonstrates. Constipation must always be looked for and most carefully avoided, preferably by mild and tonic purgatives. The patient should be weighed at frequent intervals; there is an eczema of the obese as well as of the cachectic, and both are equally obstinate.

The nervous associations of eczema are numerous and difficult to treat. Nervous exhaustion is best met by rest, change of scene and occupation, and the administration of tonics such as combinations of arsenic and iron, strychnine, phosphoric acid, cod-liver oil. It is often stated that sea air is bad for eczema; while it is possible that salt-laden breezes may irritate the eczematous skin, I am convinced by many observations that its bracing effect, especially in the tired town-dweller, on the general constitution counterbalances the local disadvantages mentioned. In other cases where nervous excitability, with vasomotor disturbances, is the dominant feature, sedative measures, such as the administration of bromides, ergotin, antipyrin, colchicum, quinine, belladonna, are indicated; spa treatment in such cases, with its quieting routine, is particularly useful.

Where there is evidence of much oedematous infiltration into the skin, with vivid redness and itching, I have repeatedly found the greatest benefit, especially in children, from doses of calcium lactate, given either in small doses (5 to 15 grains), three times a day before meals, or in large doses (1 drachm), two or three times a week. In the latter method a convenient means of administration is to suspend the powder in milk and drink the latter after vigorous stirring. Calcium lactate should be continued only until the symptoms of oedema and itching have subsided. It tends to produce constipation, and this result must be prevented, preferably by mild laxatives, such as sulphur or senna.

I have touched upon the question of baths when dealing with eczema of children. A general impression, which has acquired the force of a religious belief, has grown up that water is baneful to the eczematous skin, and clearly patients have suffered much misery from the prohibition of washing. The late Professor Lassar, one of the most experienced and successful of dermatological therapeutists, spent much enthusiasm and energy in trying to subvert this doctrine, with only partial success, for it still lives and flourishes. I am strongly of opinion that this superstition, like many others, has little foundation in fact. It is surely desirable that an eczematous surface, like any other abrasion or wound, should be kept aseptic, and, with proper precautions, washing may be resorted to in any case of eczema and at any stage. The precautions are to use no strongly alkaline or irritating soaps, to use soft water, and more especially to thoroughly dry, not by rubbing, but by "blotting" the moisture off the part, after the immersion, with absorbent wool or gauze.

The question whether a patient should be kept in bed or not will have to be decided by the extent of the disease, the parts attacked, and other considerations. In the

forms where only a small surface is involved and no constitutional illness is apparent, it would, of course, be absurd to make an invalid of the patient. But nothing is more impressive than the difference in the rate of improvement between an in-patient and an out-patient, to be attributed to the greater facility with which dressings can be applied, as well as to the advantages of equable temperature, reduction of the pulse-rate and tension, and the diminution of vasomotor disturbances and avoidance of mental activity which rest in bed entails. When the area involved is large the impossibility of keeping the dressings *in situ* in any other position than the horizontal one, will in itself sometimes compel that course. It is, of course, essential that the sickroom should be well ventilated, warm and cheerful, and that opportunities of chill in the change of dressings should be guarded against. Finally, long hours of sleep and avoidance of worry and psychological disturbances are desiderata which are too often "counsels of perfection" for the patient, but which the physician must, nevertheless, make it his business to obtain for him.

THE DISTRIBUTION OF LONGEVITY IN ENGLAND AND WALES.

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A FEW years ago, in a paper read at Plymouth, I pointed out a simple way of showing the great longevity prevalent in Devonshire by stating, for each registration district, the percentage of the total deaths which is formed by the deaths at 75 and over; and in 1907 I published a table of these percentages for all the registration districts of Devon and Cornwall.*

Since then the Registrar-General's decennial report for 1891 to 1900 has become available, and, as local general longevity may affect local general prognosis in many chronic diseases, I thought it worth while to work out these percentages of survivals for the whole of the registration districts of England and Wales. The result is remarkable. Wide differences in local longevity are found to exist in different parts of the country, and it becomes a matter of no common interest to decide how far these differences in percentage mean real disparities in local expectation of life.

The simplest mode of proceeding seemed to be to compare with each other those districts which furnished the highest and lowest percentages (Table I).† It at once became apparent that the highest were found in country districts and the lowest in town districts. Two sources of fallacy then suggested themselves—namely, the large infant death-rates of the towns and the movement of population into the towns from the country.

The first source of fallacy was easily disposed of by recalculating the percentages (for the first ten districts in each column of Table I) after deducting from the total deaths the deaths occurring under 5 years of age (Table II). The contrast between the high and low percentages remained almost as remarkable as before.

The second source of fallacy required more lengthy investigation. Table I gives in parallel columns the highest and lowest percentages amongst the districts arranged in order of numerical sequence, and side by side with each the latest available figures (1881 to 1890) from the Registrar-General's reports relating to (a) density of population expressed in terms of acres to a person, and (b) the decennial increase or decrease of population for the decade 1881 to 1890. In this table it is seen that:

1. All the low percentages are associated with relatively dense populations, and all the high percentages with relatively sparse populations.
2. Most of the low percentages are associated with increasing populations, and most of the high percentages with decreasing populations.

* In the Climatological Section of *A Book of the South-West*, the Handbook of the 1907 Annual Meeting of the British Medical Association.

† The Scilly Islands alone were omitted as, I understand, special arrangements are made there for the emigration of the surplus population.